

## CLAIMS

What is claimed is:

1. A switching device comprising:
  - at least one line card;
  - at least one switching card; and
  - a mid-plane coupled to the at least one line card and the at least one switching card wherein the at least one line card and the at least one switching card are perpendicular to each other.
2. The switching device of claim 1 wherein the at least one line card and the at least one switching card are perpendicular to and on opposite sides of the mid-plane.
3. The switching device of claim 2 wherein the at least one line card comprises an ingress port and an egress port, and a first mid-plane connector coupled to the ingress port and egress port.
4. The switching device of claim 3 wherein the at least one switching card comprises a switch element and a second mid-plane connector coupled to the switch element.
5. The switching device of claim 4 wherein the first mid-plane connector comprises a plurality of mid-plane subconnectors.
6. The switching device of claim 5 wherein the second mid-plane connector

comprises a single mid-plane connector.

7. The switching device of claim 4 wherein the first mid-plane connector comprises a single mid-plane connector.

8. The switching device of claim 7 wherein the second mid-plane connector comprises a plurality of mid-plane subconnectors.

9. The switching device of claim 4 wherein each of the first and second mid-plane connectors comprises a plurality of mid-plane subconnectors.

10. A method for configuring a switching device, the method comprising the steps of:  
providing a mid-plane; and  
providing at least one switching card and at least one line card on the mid-plane,  
wherein the at least one switching card and the at least one line card are perpendicular to each other.

11. The method of claim 10 wherein the at least one line card and the at least one switching card are perpendicular to and on opposite sides of the mid-plane.

12. The method of claim 11 wherein the at least one line card comprises an ingress port and an egress port, and a first mid-plane connector coupled to the ingress port and egress

3 port.

1 13. The method of claim 12 wherein the at least one switching card comprises a  
2 switch element and a second mid-plane connector coupled to the switch element.

1 14. The method of claim 13 wherein the first mid-plane connector comprises a  
2 plurality of mid-plane subconnectors.

1 15. The method of claim 14 wherein the second mid-plane connector comprises a  
2 single mid-plane connector.

1 16. The method of claim 13 wherein the first mid-plane connector comprises a  
2 single mid-plane connector.

1 17. The method of claim 16 wherein the second mid-plane connector comprises a  
2 plurality of mid-plane subconnectors.

1 18. The method of claim 13 wherein each of the first and second mid-plane  
2 connectors comprises a plurality of mid-plane subconnectors.